

says Roger. "While I'm doing that I carefully check for any hose chafing or loosened joints. When I see a hose chafing, I cover the spot with a short section of hose. If I find a joint loosening, I tighten it immediately."

Furthermore, Roger hoses out the core of his radiator each year and repaints it. His original radiator served him well for six years, about twice the average life span.

Roger's attention to detail has been a worthwhile investment of time. He has driven his truck for seven years and plans to have it for at least another three. With his truck on the road for such a long time, he has been able to complete his payments on it and alleviate quite a bit of stress. "It sure helped my cash flow when fuel prices shot up so quickly earlier this year," says Roger. "Other drivers facing large monthly payments for their trucks had a harder time making ends meet. I got off a lot easier."



Office of Energy Efficiency
Office de l'efficacité énergétique

*Leading Canadians to Energy Efficiency
at Home, at Work and on the Road*

The Office of Energy Efficiency of Natural Resources Canada is a dynamic organization with a mandate to renew, strengthen and expand Canada's commitment to energy efficiency in order to help address the challenges of climate change.



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Learn more

For more information on energy-saving opportunities for fleets, please write to the following:

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You can also fax your request to (613) 952-8169 or
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Owner-Operators Focus on Success

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Roger Johnston:

Careful monitoring pays dividends

Background

Roger Johnston has been a truck owner-operator for a little more than 10 years. He works out of Woodstock, New Brunswick, for Woodstock Transport, a truckload carrier with a fleet of about 90 trucks. Roger's usual route is a triangle that dips down into the United States. On the first leg of his trips, he carries paper and produce to the northeastern U.S. He then hauls produce from there to Ontario. To finish off the route, he carries produce or retail hardware goods from Ontario into the Maritimes. He moves most of his loads in 48-foot trailers at the American weight limit of 80,000 pounds (36,288 kg), but he uses 53-footers for retail hardware goods. Roger takes 225,000 km (140,000 miles) onto his odometer every year.



Roger Johnston's fuel economy of 7.1 odometer miles per gallon is one of the best in his company.

Specifications

Roger's truck is a 1993 model with an 18-speed transmission and a 460-horsepower engine that provides 1550 foot-pounds of torque. Before buying



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the truck, he looked into what types of runs he would be working and spoke with other drivers to ensure that he made the right decision.

Roger's fuel economy of 39.0 litres per 100 km (7.1 odometer miles per gallon) is one of the best in his company. His average of 41 litres per 100 km (6.9 paid miles per gallon) is also excellent. Careful monitoring of both fuel economy and equipment condition is the key to his success.

You can't manage it if you don't measure it

This old saying describes Roger's approach to maximizing his fuel economy: "I keep a log of each fuel purchase, and I figure out my fuel economy with each fill-up," he explains. "I also make a note of my idling time."

"Whenever my fuel economy is off a little, I look for the reason. It could be any number of things. Once I noticed that I was getting about two-tenths of a mile per gallon less than normal. I found a pinhole leak in the exhaust system that was too small to see. I could tell where it was by noticing a black spot around the hole. Once that was fixed, my mileage was back up to where it should have been."

"When I calculate my fuel economy after each tank of gas, I am reminded of the things I need to do to get my truck to perform its best," Roger adds. He uses progressive shifting and knows exactly how fast to drive. "I simply tried different speeds until I found the one that was the best for my truck."

Roger even has his idling worked out to a science. Although he has an automatic engine shut-off that kicks in after 15 minutes, he does idle for heating or cooling purposes when sleeping in the truck. He made a careful analysis of the costs savings for an in-cab heater and found that for his operation it did not provide a sufficient payback.

"My fuel savings earn me a vacation"

Roger estimates that by paying such close attention to fuel economy he improves his efficiency by about three-tenths of a mile per gallon. "With the high diesel prices we have to deal with now, this will put \$6,000 in my pocket at the end of the year. I use that extra money for a nice vacation every year. I'd have to drive 13,000 to 16,000 km (8,000 to 10,000 miles) to make the same amount."

"With the high diesel prices we have to deal with now, (my fuel efficiency) will put \$6,000 in my pocket at the end of the year," Roger says.



Roger's fuel efficiency

Tractor	Engine	Torque	Transmission	Rear axle	Season	Gross vehicle weight	Fuel efficiency
1993 Conventional	450 HP	1,550 foot-pounds	18-speed	3.42	Summer	36,288 kg (80,000 lb.)	37.12 L/100 km (7.6 mpg)
1993 Conventional	450 HP	1,550 foot-pounds	18-speed	3.42	Winter	36,288 kg (80,000 lb.)	42.75 L/100 km (6.6 mpg)

Source: Roger Johnston

"A stitch in time" approach to vehicle maintenance

"I've had a good, dependable truck from day one," says Roger. "I constantly check for the little things and fix them before they get worse. Whenever I hear a new noise I look for the reason behind it and I take care of the problem right away." Once, when walking across a parking lot, he noticed that the truck was sitting slightly differently. "At first I thought it may have been the way it was parked, but when I checked more carefully I discovered a broken spring."

For Roger, truck maintenance is a never-ending job. He makes oil changes every 19,000 km (12,000 miles) and he greases the truck every 4,900 to 5,600 km (3,000 to 3,500) miles without fail, even if he is in the middle of a trip. "I take my grease gun and overalls with me and grease the truck when I'm waiting to load or unload."

